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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/816,155	03/31/2004	Bogdan Cocosel	GOOGP025	9031

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EXAMINER	
CRIBBS, MALCOLM D	
ART UNIT	**PAPER NUMBER**
2115	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/816,155	COCOSEL, BOGDAN	
	Examiner	Art Unit	
	Malcolm D. Cribbs	2115	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 March 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-35* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-35* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *31 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claims 1-35 are presented for examination.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ervin [Patent No. US 6,504,266] in view of Van Phuoc et al [Patent No. US 5,633,573].

As per claim 1, Ervin teaches the invention comprising:

a signal quality detector [Fig. 2 overload detector 218] configured to detect a signal quality between a power supply line and a system component [Col 3 line 65 – Col 4 line 1]; and

a delay generator configured to generate a delay in response to the signal quality detector detecting an insufficient signal quality [wherein power up is delayed until sufficient power is available [Col 3 lines 41-42]].

Ervin teaches a method of delaying power up of components based on the signal quality [insufficient or sufficient power] wherein the components are powered upon

sufficient power; however Ervin does not teach a method of further again detecting signal quality after the expiration of the delay time interval before powering the components.

Van Phuoc teaches another method of controlling a system based on the detected signal quality. When signal quality [voltage level] is detected to be above a predetermined level the processor is powered. Van Phuoc teaches a method of detection during certain predefined intervals [Col 48 lines 55-65; wherein the processor has been powered down due to insufficient power quality furthermore while powered down the signal quality [voltage] is compared to determine if the signal quality is sufficient]. Thus, before powering the system, the signal quality is determined after the expiration of the time interval.

It would have been obvious to one of ordinary skill of the art having the teachings of Ervin and Van Phuoc at the time the invention was made, to modify the signal quality detection method of Ervin to include the ability to determine the signal quality at specific time intervals as taught by Van Phuoc. One of ordinary skill in the art would be motivated to make this combination of including, at certain time intervals, detecting the signal quality in view of the teachings of Van Phuoc, as doing so would conserve power by checking the quality at certain intervals as opposed to continuous checking and also confirms the quality at the end of the time interval instead of automatic powering.

As per claim 2, Van Phuoc teaches the invention wherein the delay generator performs an iteration of the delay generation each time the signal quality detector detects insufficient signal quality [Col 50 lines 4-24].

As per claim 3, Van Phuoc teaches the invention wherein the delay is randomly selected between 0 and 2^{n-1} where n is an iteration number and T is a period from which a delay is selected on a first iteration of generating the delay.

As per claim 4, Ervin in view of Van Phuoc teach the invention wherein the switch disconnects the power supply line from the system component upon the signal quality detector detecting insufficient signal quality [wherein inherently in order to disconnect the power upon an insufficient signal quality one of ordinary skill in the art would include a switch to disconnect the power].

As per claim 5, Van Phuoc teaches the invention wherein signal quality detector detects the insufficient signal quality if the signal quality on the power supply line is less that a threshold signal quality [Col 50 lines 5-6].

As per claim 6, Van Phuoc teaches the invention further comprising a timer configured to await the delay and to cause the signal quality detector to again detect the signal quality upon expiration of the delay [Col 48 lines 58-59; wherein up the end of an interval the voltage is again checked].

As per claim 7, Ervin in view of Van Phuoc teach the invention wherein the system component is a disk drive [wherein the components include those of a computer system which can include a disk drive].

As per claims 8-15, it is directed to a system to implement the delay module as set forth in claims 1-7. Therefore, it is rejected on the same basis as set forth hereinabove.

As per claims 16-23, it is directed to a power management apparatus to implement the delay module as set forth in claims 1-7. Therefore, it is rejected on the same basis as set forth hereinabove.

As per claims 24-31, it is directed to power management method of steps to implement the power management apparatus as set forth in claims 16-23. Therefore, it is rejected on the same basis as set forth hereinabove.

As per claims 32-34, it is directed to a resource management system to implement the delay module as set forth in claims 1-7. Therefore, it is rejected on the same basis as set forth hereinabove.

As per claim 35, it is directed to a resource management method of steps to implement the resource management system as set forth in claims 32-34. Therefore, it is rejected on the same basis as set forth hereinabove.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Malcolm D. Cribbs whose telephone number is 571-272-5689. The examiner can normally be reached on M-F 8AM-430PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Lee can be reached on 571-272-3667. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Malcolm D Cribbs
Examiner
Art Unit 2115

May 29, 2007
MC

THOMAS LEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100